JC10 Rec'd PCT/PTO 2-0 JUN 2005

US PATENT AND TRADEMARK OFFICE; US DEPARTMENT OF COMMERCE Form PTO-1390 ATTORNEY'S DOCKET NO **C 2747 PCT/US** TRANSMITTAL LETTER TO THE UNITED STATES U.S. APPLICATION NO. (If known see at CEB 1:59 , 7 **DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED INTERNATIONAL APPLICATION NO. PCT/EP2003/013977 **December 10, 2003 December 19, 2002** TITLE OF INVENTION METHOD FOR PRODUCING LIGHT COLOURED POLYALKYLENE GLYCOL DIETHYL ETHER OF FATTY ACID ALKANOLAMINE APPLICANT(S) FOR DO/EO/US Ansgar BEHLER and Almud FOLGE Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 2. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. ☐ The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. ■ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. b. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. 8. A English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)) (EXECUTED). 10.

A English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11.

An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12.

An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. A preliminary amendment. 14.

An Application Data Sheet under 37 CFR 1.76. 15.

A substitute specification. 16. ☐ A power of attorney and/or change of address letter. 17.

A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. 18. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. ☐ A second copy of the English language translation of the International application under 35 U.S.C. 154(d)(4). Information Disclosure Statement 20. ■ Other items or information:

"Express Mail" Mailing Label Number EV530260453US .

U.S. Application	J.S. Application No. (Thrown) see 37. FR INTERNATIONAL APPLICATION NO. PCT/FP2003/013977 ATTORNEY'S DOCKE C 2747 PCT/US					ET NUMBER				
21. The follow	ing fees ar	e submitt	ted:							
■ a) Basic nat	ional fee				\$300.00	\$	300.00			
				provided to USPTO		\$ 400.00				
_ 0, 000.0.710			•	E CALCULATIONS =	\$ 900.00	\$ 900.00				
			AL OF ABOV	L CALCOLATIONS -	4 500.00	Ψ				
sequence li	isting or co	mputer p	rogram listing	filed in paper over 100 sh filed in an electronic med or fraction thereof.						
Total Sheets	Extra sh	eets		each additional 50 or eof (round up to a er)	RATE					
XX - 100 =	XX/	50 =		0	× \$250.00	\$	0			
Surcharge of \$1 earliest daimed				declaration later than 30		\$	0			
CLAIMS		NUM	BER FILED	NUMBER EXTRA	RATE					
Total Cl	aims		20 - 20 =	0	0 X \$50.00	\$	0			
Independen	t Claims		3 - 3 =	0	0 X \$200.00	\$	00			
MULTIPLE DEPE	NDENT CL	AIMS (S)	(if applicable)	0	+ \$360.00	\$	0			
		TC	OTAL OF	ABOVE CALCULA	TIONS =	\$	900.00			
☐ Applicant cl		l entity st	atus. See 37	CFR 1.27. The fees indic	ated above are	\$	0			
				SUB	TOTAL =	\$	900.00			
	-	\$130.00 for furnishing the English translation later than 30 months from \$ 0								
the earliest clain	nea priorit	y date (3	/ CFR 1.492(f	TOTAL NATION	+ Al FFF =	\$	0			
	e for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be \$ 0									
accompanied by	an approp	oriate cov		FR 3.28, 3.31). \$40.00 ¡		\$	900.00			
				IOIAL I LLS ENC			ount to be nded:	\$		
							ount to be ged:	\$ 900.00		
a. A check is	n the amo	unt of \$_		to cover the above fe	es is enclosed.					

a. 🗆	A check in the amount of \$	to cover the above fees is e	nclosed

must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Customer Label No. 23657

Arthur G. Seifert

NAME ATTORNEY FOR APPLICANT

28,040

REGISTRATION NUMBER

b. ■ Please charge my Deposit Account No. <u>50-1177</u> in the amount of <u>\$ 900.00</u> to cover the above fees. A triplicate copy of this sheet is enclosed. Order No. $\underline{05\text{-}0239}$

c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any

overpayment to Deposit Account No. 50-1177 . A triplicate copy of this sheet is enclosed.

d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b))

204539737

(12) NACH DEM VERTR. ÜBER DIE INTERNATIONALE ZUSAMMENAR. A AUF DEM GEBIET DES PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum Internationales Büro





(43) Internationales Veröffentlichungsdatum 8. Juli 2004 (08.07.2004)

PCT

(10) Internationale Veröffentlichungsnummer WO~2004/056743~A1

(51) Internationale Patentklassifikation⁷: C07C 231/12

PCT/EP2003/013977

(22) Internationales Anmeldedatum:

(21) Internationales Aktenzeichen:

10. Dezember 2003 (10.12.2003)

(25) Einreichungssprache:

Deutsch

(26) Veröffentlichungssprache:

Deutsch

(30) Angaben zur Priorität:

102 59 405.8 19. Dezember 2002 (19.12.2002) DE

(71) Anmelder (für alle Bestimmungsstaaten mit Ausnahme von US): COGNIS DEUTSCHLAND GMBH & CO. KG [DE/DE]; Henkelstrasse 67, 40589 Düsseldorf (DE).

(72) Erfinder; und

(75) Erfinder/Anmelder (nur für US): BEHLER, Ansgar

[DE/DE]; Siegfriedstr. 80, 46240 Bottrop (DE). CLASEN, Frank [DE/DE]; Hagelkreuzstr. 22, 40721 Hilden (DE).

(81) Bestimmungsstaaten (national): JP, US.

(84) Bestimmungsstaaten (regional): europäisches Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Erklärung gemäß Regel 4.17:

- Erfindererklärung (Regel 4.17 Ziffer iv) nur für US

Veröffentlicht:

— mit internationalem Recherchenbericht

Zur Erklärung der Zweibuchstaben-Codes und der anderen Abkürzungen wird auf die Erklärungen ("Guidance Notes on Codes and Abbreviations") am Anfang jeder regulären Ausgabe der PCT-Gazette verwiesen.

(54) Title: METHOD FOR PRODUCING LIGHT COLOURED POLYALKYLENE GLYCOL DIETHYL ETHER OF FATTY ACID ALCANOLAMINE

(54) Bezeichnung: VERFAHREN ZUR HERSTELLUNG HELLFARBIGER FETTSÄUREALKANOLAMIDPOLYALKYLENGLYCOLETHER

(57) Abstract: The invention relates to the production of light coloured polyalkylene glycol diethyl ether of fatty acid alcanolamine by adding ethylene on fatty acid alcanolamine in the presence of alkaline catalysts. The inventive method consists in alkoxylating in the presence of reducing agents and in treating the obtained products by water vapour in alkaline media.

(57) Zusammenfassung: Vorgeschlagen wird ein Verfahren zur Herstellung von hellfarbigen Fettsäurealkanolamidpolyalkylenglycolethern durch Anlagerung von Alkylenoxiden an Fettsäurealkanolamide in Gegenwart alkalischer Katalysatoren, welches sich dadurch auszeichnet, dass man die Alkoxylierung in Gegenwart von Reduktionsmitteln durchführt und die auf diesem Wege erhaltenen Reaktionsprodukte anschliessend einer Wasserdampfbehandlung unter alkalischen Bedingungen unterwirft.

